

# I Marine Expeditionary Force(MEF) Alternative Power Solutions for Communications-Electronics

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# Background

- I MEF Individual Manpack Power Source
  - BA-5590 is primary power source
    - I MEF consumes approx.. \$3 Million per year
    - Significant hazardous waste disposal cost
    - Alternatives prior to FY98 ineffective
  - In JAN 98 I MEF complies with Safety Alert
    - Result was I MEF loss of \$678,540.00

# CG I MEF Tasker

- Reduce dependency on single source
- Reduce training cost
- Improve management of supply stock
- Exploit technology for power alternatives to support training and operations

# Approach

- Investigated currently available alternatives to primary battery usage
- Internal I MEF solutions being used
- External solutions
  - Army Battery Management Office
- Gathered information of financial impact of battery usage

# INTERNAL GOALS

- Invest in rechargeable batteries
- Continue local development of alternatives
- Maintain liaisons with Army Battery Management Office
- Improve management of supply stocks
- Charter the I MEF Alternative Power Working Group
- Develop fleet operational needs statements for capabilities to increase power use efficiency

# EXTERNAL GOALS

- Encourage establishment of a standing alternate power program office
- Facilitate MARCORSYSCOM partnering with other DOD battery and power agencies
- Participate in Joint Service Power meetings and conferences
- Advocate for unified Marine Corps battery management policies and guidelines

# Actions Taken

- Established I MEF Alternate Power Working Group
- Identified a requirement for Alternative Power Source Program Office for acquisitions
- Established partnership with Joint Service Power Team.
- Formed Alternative Power Source options from within
- Provided initial investment
- Developed Cost Avoidance processes
- Demonstrations from R&D Industry
- Testing and Feedback

# CURRENT STATUS

- Sponsorship by MARCORSYSCOM
  - Accomplished Program Office establishment
  - Draft of Capstone Requirements Document for APSCE
- Support from Budget Reform Initiative
  - Provided via Working Smarter Initiative and O&M
    - FY99 Investment \$350,000
    - FY00 Investment \$2,482,000
- Continued quarterly I MEF conferences
  - Cost Avoidance Data gathering
- Industry interaction
  - Equipment testing and analysis
- Information exchange
  - WEB Page establishment



# Alternate Power Devices

- Rechargeable Battery (BB-390)
- PP-8444 & MRC-38 Chargers
- Advanced SINGARS Alternative Power Supply
- AC/DC Inverters 250W & 1800w
- Small Generators
- Solar Arrays

# Cost Avoidance/Savings

- FY99      \$811,500
- FY00      \$1,300,000

# THE FUTURE

- Downsize
- Increase duration of charge
- Increase duration between servicing
- Improved Intelligence
- Serviceability and Utility
- Increase durability
- No hazardous material
- Training & Combat
- Concern
  - Manpower trade off